

**ABSTRACT**

A variable capacitance formed in a semiconductor substrate with a ribbed surface, having a first electrode formed of all the ribs protruding from the substrate, of portions of the substrate underlying the ribs, and of at least portions of the substrate separating the bases of two ribs, having a second electrode superposed to at least one portion of the first electrode. The ribs are irregular in terms of cross-section and/or planar base surface area.